

AMENDMENTS TO THE CLAIMS

Claim 1. (Cancelled)

Claim 2. (Currently Amended) A substantially purified nucleic acid molecule of the *Arabidopsis thaliana* genome comprising ~~from~~ at least about ~~30 to 300~~ 100 contiguous nucleotide residues of the nucleic acid sequence of SEQ ID NO: 5272, or at least about ~~30 to 300~~ 100 contiguous nucleotide residues of a complement of the nucleic acid sequence of SEQ ID NO: 5272.

Claims 3 to 5. (Cancelled)

Claim 6. (Original) The substantially purified nucleic acid molecule according to claim 2, wherein said nucleic acid molecule further comprises nucleic acid sequences comprising one or more of a promoter region, regulatory region or intron region or parts of said regions.

Claims 7 to 11. (Cancelled)

Claim 12. (Currently Amended) A substantially purified first nucleic acid molecule which is at least 98% identical to a second nucleic acid molecule comprising at least about ~~30 to 300~~ 100 contiguous nucleotide residues of: (a) the nucleic acid sequence of SEQ ID NO: 5272 or (b) the complement of the nucleic acid sequence of SEQ ID NO: 5272.

Claim 13. (Original) The substantially purified first nucleic acid molecule according to claim 12, wherein said first nucleic acid sequence is 100% identical to a nucleic acid sequence of a non-*Arabidopsis thaliana* homologue.

Claim 14. (Currently Amended) The substantially purified first nucleic acid molecule according to claim 12, wherein at least 99% of the sequence of said substantially purified nucleic acid molecule is identical to said second nucleic acid molecule.

Claims 15 to 18. (Cancelled)

Claim 19. (Currently Amended) A transformed plant cell ~~or plant~~ comprising an exogenous nucleic acid molecule which comprises:

- (a) a promoter region which functions in said cell to cause the production of a mRNA molecule; which is linked to
- (b) a structural nucleic acid molecule which is at least 98% identical to a nucleic acid molecule according to claim 2, which is linked to
- (c) a 3' non-translated sequence that functions in said cell to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of said mRNA molecule.

Claim 20. (Currently Amended) A transformed plant cell ~~or plant~~ according to claim 19, wherein said mRNA encodes a protein in said cell.

Claim 21. (Currently Amended) A transformed plant cell ~~or plant~~ according to claim 19, wherein said structural nucleic acid molecule is a transcribed nucleic acid molecule with a transcribed strand and a nontranscribed strand and the transcribed strand specifically hybridizes to an mRNA molecule.

Claims 22-25. (Cancelled)

Claim 26. (Currently Amended) A transformed plant cell ~~or plant~~ comprising an exogenous nucleic acid molecule which comprises a structural nucleic acid sequence which expresses an mRNA which is complementary to and hybridizes to at least about 30 to 300 nucleotide residues of the nucleic acid sequence of SEQ ID NO: 5272.

Claims 27 to 59. (Cancelled)

Claim 60. (Currently Amended) ~~A~~The substantially purified nucleic acid molecule of Claim 2, ~~the *Arabidopsis thaliana* genome~~ comprising at least about ~~30~~200 contiguous nucleotide residues of either SEQ ID NO: 5272 or at least about ~~30~~200 contiguous nucleotide residues of a complement of the nucleic acid sequence of SEQ ID NO: 5272.

Claim 61. (Currently Amended) ~~A~~The substantially purified nucleic acid molecule of Claim 2, ~~the *Arabidopsis thaliana* genome~~ comprising at least ~~from~~ about ~~30 to 300~~500 contiguous nucleotide residues of SEQ ID NO: 5272 or at least ~~from~~ about ~~30 to 300~~500 contiguous nucleotide residues of a complement of the nucleic acid sequence of SEQ ID NO: 5272.

Claim 62. (Currently Amended) A transformed plant cell ~~or plant~~ comprising an exogenous nucleic acid molecule which comprises:

- (a) a promoter region which functions in said cell to cause the production of a mRNA molecule; which is linked to
- (b) a structural nucleic acid molecule which comprises a nucleic acid molecule according to claim 12, which is linked to
- (c) a 3' non-translated sequence that functions in said cell to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of said mRNA molecule.

Claim 63. (Currently Amended) A transformed plant cell ~~or plant~~ comprising an exogenous nucleic acid molecule which comprises:

- (a) a promoter region which functions in said cell to cause the production of a mRNA molecule; which is linked to
- (b) a structural nucleic acid molecule which is at least 99% identical to a nucleic acid molecule according to claim 2, which is linked to
- (c) a 3' non-translated sequence that functions in said cell to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of said mRNA molecule.

Claim 64. (Currently Amended) A transformed plant cell ~~or plant~~ comprising an exogenous nucleic acid molecule which comprises:

- (a) a promoter region which functions in said cell to cause the production of a mRNA molecule; which is linked to
- (b) a structural nucleic acid molecule which comprises a nucleic acid molecule according to claim 14, which is linked to
- (c) a 3' non-translated sequence that functions in said cell to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of said mRNA molecule.

Claim 65. (New) A substantially purified nucleic acid molecule of the *Arabidopsis thaliana* genome comprising greater than 100 contiguous nucleotide residues of the nucleic acid sequence of SEQ ID NO: 5272, or greater than 100 contiguous nucleotide residues of a complement of the nucleic acid sequence of SEQ ID NO: 5272.

Claim 66. (New) The substantially purified nucleic acid molecule according to claim 2, wherein the nucleic acid molecule comprises between 300-1000 contiguous nucleotide residues of the nucleic acid sequence of SEQ ID NO: 5272, or between 300-1000 contiguous nucleotide residues of a complement of the nucleic acid sequence of SEQ ID NO: 5272.

Claim 67. (New) The substantially purified nucleic acid molecule according to claim 2, wherein the nucleic acid molecule comprises between 150 and 250 contiguous nucleotide residues of the nucleic acid sequence of SEQ ID NO: 5272, or between 150 and 250

contiguous nucleotide residues of a complement of the nucleic acid sequence of SEQ ID NO: 5272.

Claim 68. (New) The substantially purified first nucleic acid molecule according to claim 12, wherein the substantially purified first nucleic acid molecule is at least 98% identical to a second nucleic acid molecule comprising at least about 200 contiguous nucleotide residues of: (a) the nucleic acid sequence of SEQ ID NO: 5272 or (b) the complement of the nucleic acid sequence of SEQ ID NO: 5272.

Claim 69. (New) The substantially purified first nucleic acid molecule according to claim 12, wherein the substantially purified first nucleic acid molecule is at least 98% identical to a second nucleic acid molecule comprising at least about 500 contiguous nucleotide residues of: (a) the nucleic acid sequence of SEQ ID NO: 5272 or (b) the complement of the nucleic acid sequence of SEQ ID NO: 5272.

Claim 70. (New) A substantially purified first nucleic acid which is at least 98% identical to a second nucleic acid molecule comprising greater than 100 contiguous nucleotide residues of: (a) the nucleic acid sequence of SEQ ID NO: 5272 or (b) the complement of the nucleic acid sequence of SEQ ID NO: 5272.

Claim 71. (New) The substantially purified first nucleic acid molecule according to claim 12, wherein the substantially purified first nucleic acid molecule is at least 98% identical to a second nucleic acid molecule comprising between 300-1000 nucleotide residues of: (a) the nucleic acid

sequence of SEQ ID NO: 5272 or (b) the complement of the nucleic acid sequence of SEQ ID NO: 5272.

Claim 72. (New) The substantially purified first nucleic acid molecule according to claim 12, wherein the substantially purified first nucleic acid molecule is at least 98% identical to a second nucleic acid molecule comprising between 150 and 250 nucleotide residues of: (a) the nucleic acid sequence of SEQ ID NO: 5272 or (b) the complement of the nucleic acid sequence of SEQ ID NO: 5272.

Claim 73. (New) A transformed plant cell comprising an exogenous nucleic acid molecule which comprises a structural nucleic acid sequence which expresses an mRNA which is complementary to and hybridizes to at least about 100 nucleotide residues of the nucleic acid sequence of SEQ ID NO: 5272.

Claim 74. (New) The transformed plant cell according to claim 73, wherein the exogenous nucleic acid molecule comprises a structural nucleic acid sequence which expresses an mRNA which is complementary to and hybridizes to at least about 200 nucleotide residues of the nucleic acid sequence of SEQ ID NO: 5272.

Claim 75. (New) The transformed plant cell according to claim 73, wherein the exogenous nucleic acid molecule comprises a structural nucleic acid sequence which expresses an mRNA which is complementary to and hybridizes to at least about 500 nucleotide residues of the nucleic acid sequence of SEQ ID NO: 5272.

Claim 76. (New) A transformed plant cell comprising an exogenous nucleic acid molecule which comprises a structural nucleic acid sequence which expresses an mRNA which is complementary to and hybridizes to greater than 100 nucleotide residues of the nucleic acid sequence of SEQ ID NO: 5272.

Claim 77. (New) The transformed plant cell according to claim 73, wherein the exogenous nucleic acid molecule comprises a structural nucleic acid sequence which expresses an mRNA which is complementary to and hybridizes to between 300-1000 nucleotide residues of the nucleic acid sequence of SEQ ID NO: 5272.

Claim 78. (New) The transformed plant cell according to claim 73, wherein the exogenous nucleic acid molecule comprises a structural nucleic acid sequence which expresses an mRNA which is complementary to and hybridizes to between 150 and 250 nucleotide residues of the nucleic acid sequence of SEQ ID NO: 5272.